

## Recombinant Human SLAMF7 (C-6His) Catalog No: C316

Description Recombinant Human SLAM Family Member 7 is produced by our Mammalian expression system and

the target gene encoding Ser23-Met226 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name SLAM Family Member 7; CD2 Subset 1; CD2-Like Receptor-Activating Cytotoxic Cells; CRACC;

Membrane Protein FOAP-12; Novel Ly9; Protein 19A; CD319; SLAMF7; CS1

Accession No. Q9NQ25

Predicted Molecular Weight

23.4kDa

AP Molecular Weight

32-50kDa, reducing conditions.

**Formulation** 

Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 5% Trehalose, pH 7.4.

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Background** 

SLAMF7 is a single-pass type I membrane protein and contains 1 Ig-like C2-type (immunoglobulin-like) domain. SLAMF7 is expressed in NK cells, activated B-cells, NK-cell line but not in promyelocytic, B-cell lines, or T-cell lines. Although the cytoplasmic domain of CS1 contains immunoreceptor tyrosine-based switch motifs (ITSM), which enables to recruite signaling lymphocyte activation molecule (SLAM)-associated protein (SAP/SH2D1A), it activates NK cells in the absence of a functional SAP. SLAMF7 positively regulated natural killer cell functions by a mechanism dependent on the adaptor EAT-2 but not the relatedadaptor SAP. However, in the absence of EAT-2, CRACC potently inhibited natural killer cell function. It was also inhibitory in T cells, which are typically devoid of EAT-2. Thus, SLAMF7 can exert activating or inhibitory influences on cells of the immune system depending on cellular context and the availability of effector proteins.

## **SDS-Page**



